

Introduction

Since the inception of Twitter in 2006, the platform has grown tremendously, with over 199 million daily active users worldwide as of May 2021 (Tankovska, 2021).

The use of Twitter in academia is of particular interest to me since I have used the platform to live tweet clinical conferences, to share my professional work, and to connect with large networks of clinicians, medical librarians, and methodologists. These connections have often led to lasting relationships and professional collaborations.

Objective

To search for literature about Twitter's significance in higher education and perform a bibliometric analysis with visualizations based on the results.

Methods

I performed a literature search using relevant keywords in PubMed through NCBI, Scopus through Elsevier, and Academic Search Ultimate on the EBSCO platform. This provided the core literature for analysis.

Results were limited to journal articles published from 2006-2021, but no other limits were made. The results have been visualized using a variety of tools including Excel, Canva, Wordclouds.com, VOSviewer, and Tableau Public.

IDENTIFICATION OF LITERATURE

PLATFORM	NUMBER OF RESULTS
PubMed via NCBI	440
Scopus via Elsevier	293
Academic Search Ultimate	188
TOTAL	921

Limits: 2006-2021, Journal Articles

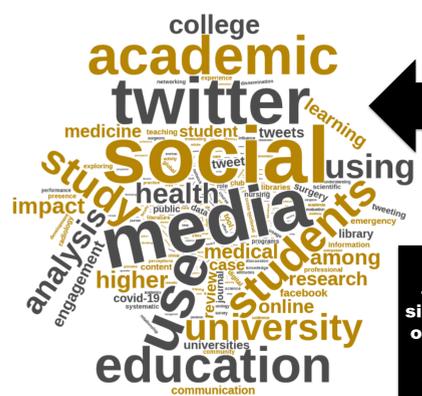
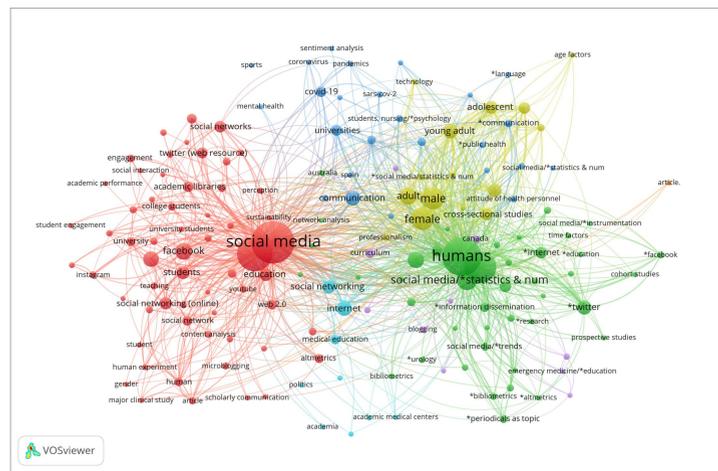
158 Duplicates Removed

763 Remaining Results

PUBMED
 (twitter[ti] OR tweet[ti] OR ("social media"[majr] OR "social media"[ti]) AND (twitter[ti] OR tweet[ti])) AND ("higher education"[tiab] OR college[tiab] OR universit[tiab] OR "post secondary"[tiab] OR postsecondary[tiab] OR faculty[tiab] OR professor[tiab] OR academia[tiab] OR academic[tiab] OR "lecture"[tiab] OR "lecturer"[tiab] OR "student"[tiab] OR "students"[tiab] OR "lecture"[tiab])

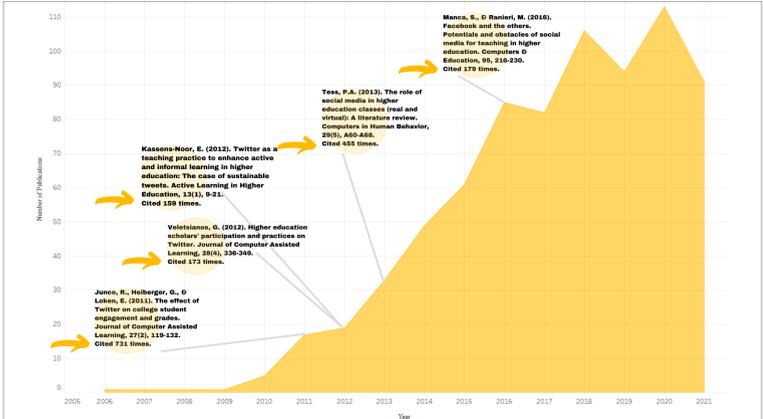
SCOPUS
 TITLE (twitter OR tweet) OR (TITLE ("social media") AND TITLE-ABS-KEY (twitter OR tweet)) AND TITLE ("higher education" OR college OR universit OR "post secondary" OR postsecondary OR faculty OR professor OR academia OR academic OR "lecture")

ACADEMIC SEARCH ULTIMATE
 (TI twitter OR TI tweet OR (DE "social media" OR TI "social media") AND ("twitter" OR "tweet")) AND TI ("higher education" OR college OR universit OR "post secondary" OR postsecondary OR faculty OR professor OR academia OR academic OR "lecture")



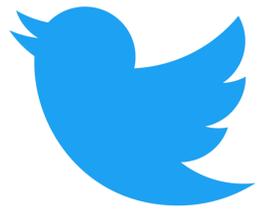
Title word analysis based on all results. Visualization created with Wordclouds.com. Aside from many expected terms, "COVID-19" and "Facebook" appeared frequently.

Journals that have published six or more articles on the topic of Twitter since 2006 based on all results. Visualization created with Tableau Public.



Number of publications by year based on all results. The number of publications has grown enormously since 2006. The most highly cited articles are noted and based on Scopus data. Visualization created with Tableau Public and Canva.

Keyword network analysis based on all results. Colored networks demonstrate connections within the body of literature. Visualization created with VOSviewer. "Social media" is strongly connected to "humans" and also to "communication", "social networking", "internet", and more.



Discussion & Conclusion

Discussion: Twitter appears to be used in academia for professional networking and information dissemination as well as for instruction and pedagogy. Twitter has been widely adopted by students, faculty, and staff, and it is sometimes used for departmental or divisional outreach and advocacy. Authors of publications share concern about its benefits and pitfalls for use in education.

Limitations: More diverse resources, such as ERIC and JSTOR, should be added to provide a more comprehensive analysis. Results reflected the use of Twitter not only in liberal arts colleges and universities, but in medical schools and teaching hospitals, because of the inclusion of PubMed and Scopus. Additional database results may change the visualizations. Further, the data analysis is limited by the functions of the platforms; for example, only Scopus consistently displays and exports "Cited By" data, and the number is often far lower than what a user would find in Google Scholar's Cited By metric. An attempt to perform an author network analysis was not successful as authors in this field do not appear to be collaborating. **Conclusion:** These visualizations would no doubt be more beneficial if they were part of a more robust narrative or scoping literature review that more formally maps themes and best practices in the broader field of social media and higher education.

Reference

Tankovska, H. (2021, May 21). Number of monetizable daily active Twitter users (mDAU) worldwide from 1st quarter 2017 to 1st quarter 2021. Statista. <https://www.statista.com/statistics/970920/monetizable-daily-active-twitter-users-worldwide/>